

CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9283	3	71-9283	USA/9283/B(U)-96	1 OF	3

2 PREAMBLE

- a This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71 "Packaging and Transportation of Radioactive Material."
- b This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported

3 THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

- | | |
|---|--|
| <p>a ISSUED TO (<i>Name and Address</i>)</p> <p>QSA Global, Inc.
40 North Avenue
Burlington, MA 01803</p> | <p>b TITLE AND IDENTIFICATION OF REPORT OR APPLICATION</p> <p>AEA Technology/QSA Inc. application dated
May 21, 1998, as supplemented.</p> |
|---|--|

4 CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71 as applicable, and the conditions specified below

5

(a) Packaging

- (1) Model No.: OPL-660 and OP-660
- (2) Description

The Model Nos. OPL-660 and OP-660 consist of a radiography camera within a protective container. The protective container is a 20 mm Cartridge Shipping and Storage box fabricated according to military specification MIL-S-23389B. The protective container is of welded steel construction and is approximately 18½ inches long, 14½ inches high, and 8¼ inches wide. The protective container is fitted with foam and wood inserts and a lid that is secured by latches. The Model 660 series projector fits snugly in the center of the foam inserts within the protective container. The Model No. OPL-660 container has thin lead sheets to provide extra shielding at the ends and bottom. The maximum weight of the package is 88 pounds.

The Model 660 series projector is a radiography device. The projector's overall dimensions are approximately 12¾ inches long, 5¼ inches wide, and 9½ inches high. The projector weighs a maximum of 56 pounds. The principal components of the 360 series projectors include an outer steel shell, polyurethane foam, a depleted uranium shield, an "S" tube, and end plugs. The sealed source contents are securely positioned in the "S" tube by a source cable locking device and shipping plug.

700-RECEIVED 10/1/08 IMMISSION

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9283	3	71-9283	USA/9283/B(U)-96	2 CF	3

(3) Drawings

The packaging is constructed in accordance with the following AEA Technology QSA, Inc., Drawings:

R66050, Rev. C, Sheets 1 & 2, and R66060, Rev. A, Sheets 1-3.

5 (b) Contents

(1) Type and form of material

Iridium-192 sources which meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

(i) 140 Curies (output) for the Model No. 660B or 660BE projectors.

(ii) 120 Curies (output) for the Model No. 660, 660E, 660A or 660AE projectors.

Output curies are determined by measuring the source output at 1 meter and expressing its activity in curies derived from the following: 0.48 R/h-Ci Iridium-192 at 1 meter. (Ref: American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography.")

6. The source shall be secured in the shielded position of the packaging by the source assembly lock, lock cap and safety plug assembly. The safety plug assembly, lock cap and source assembly must be fabricated of materials capable of resisting a 1475 °F fire environment for one-half hour and maintaining their positioning function. The locking ball of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.

7. The name plate must be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining its legibility.

8. In addition to the requirements of Subpart G of 10 CFR Part 71:

(a) The package must meet the Acceptance Test and Maintenance Program of Chapter 8.0 of the application, as supplemented; and

(b) The package shall be prepared for shipment in accordance with the Operating Procedures in Chapter 7.0 of the application, as supplemented.

9. The package authorized by this certificate is hereby approved for use under general license provisions of 10 CFR 71.17.

10. Revision No. 2 of this certificate may be used until June 30, 2008.

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

CERTIFICATE NUMBER	REVISION NUMBER	DOCKET NUMBER	PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9283	3	71-9283	USA/9283/B(U)-96	3	CF 3

12. Expiration date: June 30, 2013.

REFERENCES

AEA Technology QSA, Inc., application dated May 21, 1998.

Supplements dated: June 15, 1998; March 6, 2003; May 30, 2006; and November 6, 2007.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Robert A. Nelson, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Date: December 7, 2007.



SAFETY EVALUATION REPORT
Model Nos. OPL-660 and OP-660 Packages
Certificate of Compliance No. 9283
Revision No. 3

SUMMARY

By application dated November 6, 2007, QSA Global, Inc. (QSA) submitted a renewal request for the Model Nos. OPL-660 and OP-660 packages. QSA did not request any changes to the package design or its contents. The certificate has been renewed for a term expiring on June 30, 2013.

EVALUATION

QSA requested renewal of Certificate of Compliance No. 9283 for the Model Nos. OPL-660 and OP-660 packages by application dated November 6, 2007. The applicant did not request any design changes to the package. The staff reviewed the documents referenced in the certificate and determined that the required documentation was available and complete.

Changes to Certificate of Compliance

Minor editorial and formatting changes were made throughout the entirety of the certificate.

Condition No. 10 of Revision No. 2 was deleted. This condition is no longer necessary since the packages should reflect the correct Package Identification Number as of July 31, 2007. As a result of deleting this condition the conditions following it were renumbered accordingly.

Condition No. 10 of the certificate authorizes use of the previous revision of the certificate until June 30, 2008.

Condition No. 12 reflects the new expiration date of the certificate.

CONCLUSION

The certificate expiration date was changed to June 30, 2013. This change does not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9283, Revision No. 3,
on December 7, 2007.